As filed with the Securities and Exchange Commission on August 25, 2020

Registration No.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NAVIDEA BIOPHARMACEUTICALS, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 31-1080091 (I.R.S. Employer Identification Number)

4995 Bradenton Avenue, Suite 240 Dublin, Ohio 43017-3552 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Jed A. Latkin Chief Executive Officer, Chief Operating Officer & Chief Financial Officer Navidea Biopharmaceuticals, Inc. 4995 Bradenton Avenue, Suite 240 Dublin, Ohio 43017 (614) 793-7500 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

> *Copy to:* Faith L. Charles, Esq. Thompson Hine LLP 335 Madison Avenue, 12th Floor New York, New York 10017-4611 (212) 908-3905

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. \Box

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company in Rule 12b-2 of the Exchange Act.

Large accelerated filer \square Non-accelerated filer \boxtimes Emerging growth company \square Accelerated filer \Box Smaller reporting company \boxtimes

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	2,373,529	\$3.33	\$7,903,851.57	\$1,025.92

(1) The Registrant is hereby registering for resale from time to time by the selling stockholder named herein of up to 2,373,529 shares of its common stock that were initially issued pursuant to the Stock Purchase Agreement dated as of February 13, 2020, by and between the Registrant and the selling stockholder. Pursuant to Rule 416 under the Securities Act, this Registration Statement also covers such additional number of shares of common stock that may be issued as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for purposes of determining the registration fee pursuant to Rule 457(c) under the Securities Act, based on the average high and low prices per share of the common stock as reported on the NYSE American on August 21, 2020, a date within five business days prior to the filing of this Registration Statement.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this prospectus is not complete and may be changed. The selling stockholder named in this prospectus may not sell these securities until the registration statement becomes effective. This prospectus is not an offer to sell these securities, and the selling stockholder named in this prospectus is not soliciting offers to buy these securities in any jurisdiction where the offer for sale is not permitted.

PROSPECTUS

SUBJECT TO COMPLETION, DATED AUGUST 25, 2020



NAVIDEA BIOPHARMACEUTICALS, INC.

2,373,529 Shares of Common Stock

This prospectus relates to the disposition from time to time of up to 2,373,529 shares of our common stock, \$0.001 par value per share (the *Shares*"), which are held by the selling stockholder named in this prospectus. We issued the Shares to the selling stockholder pursuant to a Stock Purchase Agreement, dated February 13, 2020 (the "Stock Purchase Agreement"). We are registering the resale of the Shares as required by the Registration Rights Agreement we entered into with the selling stockholder on February 13, 2020 (the "Registration Rights Agreement").

The selling stockholder may resell or dispose of the Shares, or interests therein, at fixed prices, at prevailing market prices at the time of sale or at prices negotiated with purchasers, to or through underwriters, broker-dealers, agents, or through any other means described in the section of this prospectus entitled "Plan of Distribution". The selling stockholder will bear all commissions and discounts, if any, attributable to the sale or disposition of the Shares, or interests therein, held by the selling stockholder. We will bear all costs, expenses and fees in connection with the registration of the Shares. We will not receive any of the proceeds from the sale of the Shares by the selling stockholder.

Our common stock is listed on the NYSE American under the symbol "NAVB." On August 21, 2020, the last reported sale price of our common stock on the NYSE American was \$3.42 per share. You are urged to obtain current market quotations for our common stock.

Investing in our securities involves a high degree of risk. See the section entitled "Risk Factors" beginning on page 9of this prospectus and in the documents incorporated by reference into this prospectus for a discussion of risks that should be considered in connection with an investment in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or delivery of accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is

, 2020

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You should read this prospectus, including all documents incorporated herein by reference, together with additional information described under "Where You Can Find More Information."

You may obtain the information incorporated by reference without charge by following the instructions under "Where You Can Find More Information."

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholder may offer to sell, and seek offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

In this prospectus, "we," "us," "our" and "Navidea" refer to Navidea Biopharmaceuticals, Inc. and its subsidiaries.

ABOUT THIS PROSPECTUS

You should rely only on the information we have provided or incorporated by reference into this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the Shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

The selling stockholder is offering the Shares only in jurisdictions where such issuances are permitted. The distribution of this prospectus and the issuance of the Shares in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the issuance of the Shares and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, the Shares offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the 'SEC''), under which the selling stockholder may offer from time to time up to an aggregate of 2,373,529 Shares in one or more offerings. If required, each time a selling stockholder offers Shares, we will provide you with, in addition to this prospectus, a prospectus supplement that will contain specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to that offering. We may also use a prospectus supplement and any related free writing prospectus to add, update or change any of the information contained in this prospectus or in documents we have incorporated by reference. This prospectus, includes all material information relating to that one approximation relating to this offering. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus will be deemed modified or superseded by those made in a prospectus supplement. Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under the section entitled "Incorporation of Certain Information by Reference" before buying any of the securities offered.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled "Where You Can Find More Information."

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 (the "*PSLRA*") provides a safe harbor for forward-looking statements made by or on behalf of the Company. Statements in this document which relate to other than strictly historical facts, such as statements about the Company's plans and strategies, expectations for future financial performance, new and existing products and technologies, anticipated clinical and regulatory pathways, the ability to obtain, and timing of, regulatory approvals of the Company's products, the timing and anticipated results of commercialization efforts, and anticipated markets for the Company's products, are forward-looking statements within the meaning of the PSLRA. The words "anticipate," "estimate," "expect," "future," "intend," "plan," "project," and similar expressions identify forward-looking statements that speak only as of the date hereof. Investors are cautioned that such statements involve risks and uncertainties that could cause actual results to differ materially from historical or anticipated results due to many factors including, but not limited to, our history of operating losses and uncertainty of future profitability, accumulated deficit, future capital needs, the outcome of any pending litigation, uncertainty of capital funding, dependence on royalties and grant revenue, limited product line and distribution channels, competition, risks of development of new products, our ability to maintain effective control over financial reporting, our ability to comply with NYSE American continued listing standards, and other risks set forth in our Form 10-K under Item 1A, "Risk Factors" and beginning on page 9 of this prospectus. Navidea undertakes no obligation to publicly update or revise any forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to:

- the impact of the global COVID-19 pandemic on our business, financial condition or prospects, including a decline in the volume of procedures using our products, potential delays and disruptions to global supply chains, manufacturing activities, logistics, operations, employees and contractors, the business activities of our suppliers, distributors, customers and other business partners, as well as the effects on worldwide economies, financial markets, social institutions, labor markets and healthcare systems;
- our history of operating losses and uncertainty of future profitability;
- our ability to successfully complete research and further development of our drug candidates;
- the timing, cost and uncertainty of obtaining regulatory approvals of our drug candidates, including delays and additional costs related to the ongoing COVID-19
 pandemic;
- our ability to successfully commercialize our drug candidates, including delays or disruptions related to the ongoing COVID-19 pandemic;
- our ability to raise capital sufficient to fund our development programs, including unavailability of funds or delays in receiving funds as a result of the ongoing COVID-19 pandemic;
- delays in receipt of anticipated proceeds from our capital funding transactions and other receivables;
- our dependence on royalties and grant revenue;
- our limited product line and distribution channels;
- advances in technologies and development of new competitive products;
- our ability to maintain effective control over financial reporting;
- the outcome of any pending litigation;
- our ability to comply with NYSE American continued listing standards; and
- other risk factors set forth in this report and detailed in our most recent Annual Report on Form 10-K and other SEC filings.

In addition, in this prospectus, we use words such as "anticipate," "believe," "estimate," "future," "intend," "plan," "project," and similar expressions to identify forward-looking statements.

We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this report. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus or incorporated by reference into this prospectus from our filings with the U.S. Securities and Exchange Commission (the "SEC") listed in the section of the prospectus entitled "Incorporation of Certain Information by Reference." Because it is only a summary, it does not contain all of the information that should be consider before purchasing our securities in this offering and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere or incorporated by reference into this prospectus. You should read the entire prospectus, the registration statement of which this prospectus is a part, and the information incorporated by reference herein in their entirety, including the "Risk Factors" and our financial statements and the related notes incorporated by reference into this prospectus in this offering. Unless the context requires otherwise, references in this prospectus to "the Company," "Navidea," "we," "us," and "our" refer to Navidea Biopharmaceuticals. Inc. together with its wholly owned subsidiary, Navidea Biopharmaceuticals Limited, and our majority-owned subsidiary, Macrophage Therapeutics, Inc.

Overview

Our Company

Navidea Biopharmaceuticals, Inc., a Delaware corporation (NYSE American: NAVB), is a biopharmaceutical company focused on the development and commercialization of precision immunodiagnostic agents and immunotherapeutics. Navidea is developing multiple precision-targeted products based on our Manocept[™] platform to enhance patient care by identifying the sites and pathways of undetected disease and enable better diagnostic accuracy, clinical decision-making and targeted treatment.

Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed on activated macrophages. The Manocept platform serves as the molecular backbone of Tc99m tilmanocept, the first product developed and commercialized by Navidea based on the platform.

In March 2017, the Company completed the sale to Cardinal Health 414, LLC ("Cardinal Health 414") of its assets related to the Company's radioactive diagnostic agent Tc99m tilmanocept, marketed under the Lymphoseek® trademark, used for lymphatic mapping, lymph node biopsy, and the diagnosis of metastatic spread to lymph nodes for staging of cancer, in Canada, Mexico and the United States.

Other than Tc99m tilmanocept, which the Company has a license to distribute outside of Canada, Mexico and the United States, none of the Company's drug product candidates have been approved for sale in any market.

Our business is focused on two primary types of drug products: (i) diagnostic substances, including Tc99m tilmanocept and other diagnostic applications of our Manocept platform, and NAV4694 (sublicensed in April 2018), and (ii) therapeutic development programs, including therapeutic applications of our Manocept platform.

Technology and Product Candidates

Our primary development efforts over the last several years were focused on diagnostic products, including Lymphoseek, which was sold to Cardinal Health 414 in March 2017. Our more recent initiatives have been focused exclusively on diagnostic and therapeutic line extensions based on our Manocept platform.

During the ongoing COVID-19 global pandemic, the Company's primary focus is the safety of its employees, the employees of its clinical trial sites, and the patients enrolled in its clinical trials. The Company is working hard to mitigate any safety risk along with any long-term impact on its clinical development programs. To date, we do not believe there has been any appreciable impact to the Company's clinical development and regulatory timelines resulting from COVID-19. Navidea has enrolled sufficient patients in Arm 3 of the Company's ongoing Phase 2b clinical trial (NAV3-31) and delivered interim data. The Company's pivotal Phase 3 trial for rheumatoid arthritis (NAV3-33) also remains on track for a second-half 2020 launch as previously communicated. In addition, the investigator-initiated Phase 2 cardiovascular ("CV") study ongoing at Massachusetts General Hospital ("MGH"). Results provided to Navidea thus far have paralleled data in our earlier published article, and these data are supportive of Navidea's hypothesis that tilmanocept can provide marked signal to background in a host of CV disease applications. Navidea continues to anticipate meeting with the FDA in the coming months to discuss upcoming clinical trial designs.

Manocept Platform - Diagnostics and Therapeutics Background

Navidea's Manocept platform is predicated on the ability to specifically target the CD206 mannose receptor expressed primarily on activated macrophages. This flexible and versatile platform serves as a molecular backbone for purpose-built targeted imaging molecules that may significantly impact patient care by providing enhanced diagnostic accuracy, clinical decision-making, and target-specific treatment. This CD206-targeted drug platform is applicable to a range of diagnostic modalities, including single photon emission computed tomography ("SPECT"), positron emission tomography ("PET"), gamma-scanning and intra-operative and/or optical-fluorescence detection, as well as delivery of therapeutic compounds that target macrophages, and their role in a variety of immune- and inflammation-involved diseases. The FDA-approved sentinel node/lymphatic mapping agent, Tc99m tilmanocept, is representative of the ability to successfully exploit this mechanism to develop powerful new products and to expand this technology into additional diagnostic and therapeutic applications.

Activated macrophages play important roles in many disease states and are an emerging target in many diseases where diagnostic uncertainty exists. Impairment of the macrophage-driven disease mechanisms is an area of increasing and proven focus in medicine. The number of people affected by all the inflammatory diseases combined is estimated at more than 40 million in the United States and up to 700 million worldwide, making macrophage-mediated diseases an area of remarkable clinical importance. There are many recognized disorders having macrophage involvement, including rheumatoid arthritis ("RA"), atherosclerosis/vulnerable plaque, nonalcoholic steatohepatitis ("NASH"), inflammatory bowel diseases, systemic lupus erythematosus, Kaposi's sarcoma ("KS"), leishmaniasis, and others that span general clinical areas in oncology, autoimmunity, infectious diseases, cardiology, central nervous system ("CNS") diseases, and inflammation. For the near term, we have selected target diseases that may, if successfully developed, benefit from this technology.

The Company has developed processes for producing the first two therapeutic Manocept immuno-construct series, MT-1000 series, which is designed to specifically target and kill or modify activated CD206+ macrophages by delivering doxorubicin, and MT-2000 series, which is designed to inhibit the inflammatory activity of activated CD206+ macrophages by delivering a potent anti-inflammatory agent, dexamethasone. We have contracted with independent facilities to improve chemical syntheses and to produce sufficient quantities of the MT-1000 series and MT-2000 series agents along with the concomitant analytical standards, to provide material for planned preclinical animal studies and future clinical trials.

Manocept Platform – Immuno-Diagnostics Clinical Data

Rheumatoid Arthritis

Two Tc99m tilmanocept dose escalation studies in RA have been completed. The first study was completed and included 18 subjects (nine with active disease and nine healthy subjects) dosed subcutaneously with 50 and 200 μ g/2mCi Tc99m tilmanocept (ClinicalTrials.gov NCT02683421). The results of this study were presented at five international meetings, including Biotechnology Innovation Organization, Society of Nuclear Medicine and Molecular Imaging ("SNMMI"), and The American College of Rheumatology ("ACR"). In addition, based on completion of extensive preclinical dosing studies pursuant to our dialog with the FDA, we have completed a Phase 1/2 study involving intravenous ("IV") dosing of 39 subjects with IV-administered Tc99m tilmanocept (ClinicalTrials.gov NCT02865434). In conjunction with this study, we have completed pharmacodynamics and radiation dosimetry phases in human subjects as well. The majority of the costs of these studies have been supported through a Small Business Innovation Research ("SBIR") grant (NIH/NIAMSD Grant 1 R44 AR067583-01A1). Results of this Phase 1/2 study were presented at fue June 2018 ACR meeting, the 2018 European League Against Rheumatism ("EULAR") meeting and the 2018 ACR meeting. These studies have been combined and submitted for peer review publication and full published results will follow.

In June 2019, the results of the Company's NAV3-21 clinical study were presented at the SNMMI Annual Meeting in Anaheim, California. The presentation, titled "A Phase 1/2 Study of Intravenously Administered Tc99m Tilmanocept to Determine Safety, Tolerability, Optimal Clinical Dose Selection, and Imaging Timepoint in Patients Clinically Diagnosed with Rheumatoid Arthritis," was delivered by Arash Kardan, M.D. In addition, an abstract of the presentation was published in the *Journal of Nuclear Medicine* (2019, Volume 60, Supplement 1). The NAV3-21 study enrolled subjects with active, moderate-to-severe RA, and healthy controls. Results from the completed trial demonstrate that Tc99m tilmanocept is well-tolerated with no serious adverse events, adverse drug reactions, or drug-related adverse events observed. Additionally, static planar images revealed joint-specific Tc99m tilmanocept localization in RA subjects to disease-involved joints of the shoulders, knees, hands, and feet, but no joint-specific localization in healthy control subjects, revealing potentially significant immunodiagnostic information about CD206-expressing synovial macrophage involvement in RA. An optimal imaging time window post-Tc99m tilmanocept IV administration, as well as optimal dosing, were also determined.



In April 2019, the Company received feedback from the FDA regarding the Company's planned clinical studies that will evaluate joint disease in patients with RA and monitor patient response to therapy. The Company's proposed RA studies were discussed with the FDA during an in-person meeting and through follow-up collaborative efforts. The FDA has communicated that the first study, a Phase 2b trial, is aligned with expectations for the studies and that they will continue to work with Navidea as we progress into a second Phase 2b trial correlating Tc99m tilmanocept uptake in RA-involved joints with CD206 immunohistochemistry findings from synovial biopsies and into the planned Phase 3 clinical trial. In May 2019, we began enrolling patients into the first Phase 2b study, entitled "Evaluation of the Precision and Sensitivity of Tilmanocept Uptake Value ("TUV") on Tc99m Tilmanocept Planar Imaging" (ClinicalTrials.gov MCT03938636). This study will provide confirmatory support necessary to initiate Navidea's Phase 3 study program. In October 2019, the Company performed its first interim analysis of this interim analysis were in line with the Company's hypotheses that Tc99m tilmanocept can provide robust, stable imaging in healthy subjects as well as in patients with active RA, and provide the fundamental information needed to keep moving forward into the Phase 3. A summary of these results was presented at the 2020 EULAR meeting. In May 2020, the Company announced the results of its second interim analysis, covering Arm 3 of the trial. This Arm mirrors the upcoming Phase 3 in design and provided information relevant of re sample size calculation for the Phase 3 as well as support for the hypothesis that Tc99m tilmanocept imaging can provide an early indicator of treatment efficacy of anti-TNF alpha therapeutics. In June 2020, the Company announced full enrollment into this trial, with imaging events ongoing in patients in Arm 3. The pivotal Phase 3 study program will assess joint disease status and monitor patient res

Cardiovascular Disease

In collaboration with researchers at Massachusetts General Hospital, Navidea has completed one and has initiated a second investigator-initiated clinical study evaluating Tc99m tilmanocept's ability to enable imaging of atherosclerotic plaques. Results of these studies provide strong preliminary evidence of the potential of Tc99m tilmanocept to accumulate specifically in and enable imaging of non-calcified atherosclerotic plaques. Non-calcified atherosclerotic plaques include plaques with morphologies indicating a high risk of rupture. Rupture of such plaques causes myocardial infarctions (heart attacks) and a significant portion of ischemic strokes. The studies compared aortic Tc99m tilmanocept uptake imaged by SPECT/CT in clinically asymptomatic subjects with intermediate Framingham Risk Scores ("FRS") who were infected with Human Immunodeficiency Virus ("HIV") as compared to healthy, uninfected, FRS and age-matched subjects. Tc99m tilmanocept SPECT/CT images were compared to aortic images of the same subjects obtained by contrast enhanced coronary computed tomography angiography and/or [18F]NaF PET/CT.

A nine-subject study to evaluate diagnostic imaging of emerging atherosclerosis plaque with the Tc99m tilmanocept product dosed subcutaneously is complete (ClinicalTrials.gov NCT02542371). The results of this study were presented at two major international meetings (Conference on Retroviruses and Opportunistic Infectious and SNMMI, 2017) and published in early release in the *Journal of Infectious Diseases* in January 2017 (published in the circulated version, *Journal of Infectious Diseases* (2017) 215 (8): 1264-1269), confirming that the Tc99m tilmanocept product can both quantitatively and qualitatively target non-calcified plaque in the aortic arch of Acquired Immunodeficiency Syndrome ("AIDS") patients (supported by NIH/NHLBI Grant 1 R43 HL127846-01).

We have also commenced a second Phase 1/2 investigator-initiated study in cooperation with Massachusetts General Hospital in subjects with HIV that expands the original study in both the scope of the drug administration as well as the diagnostic assessment of the subjects. This study will enroll up to 24 AIDS subjects and healthy controls in imaging non-calcified plaque using IV and SC-administered Tc99m tilmanocept and will expand the initial investigation to the assessment of aortic plaque as well as carotid and coronary arteries. Initial images from this study are currently being evaluated.

Navidea has also been awarded a \$225,000 phase 1 Small Business Technology Transfer grant (1R41HL147640-01A1) entitled*Gallium 68 Tilmanocept for PET Imaging of Atherosclerosis Plaques*. This grant will support a research collaboration between Navidea and Dr. Suzanne Lapi of the University of Alabama Birmingham. These efforts will evaluate [68]gallium tilmanocept for imaging plaques in an animal model of atherosclerosis and began activities in the fourth quarter of 2019.

Kaposi's Sarcoma

We initiated and completed a study of KS in 2015 (ClinicalTrials.gov NCT022201420) and received additional funding from the National Institutes of Health ("NIH") in 2016 to continue diagnostic studies in this disease. The new support not only continues the imaging of the cutaneous form of this disease but expands this to imaging of visceral disease via IV administration of Tc99m tilmanocept (NIH/NCI 1 R44 CA192859-01A1; ClinicalTrials.gov NCT03157167). This now-escalated study includes a pathology/biopsy component as well as an imaging component to determine pathology concordance with image assessment. We received Institutional Review Board approval of the clinical protocol and initiated a Phase 1/2 clinical study in KS in 2017. This trial has completed enrollment and imaging. Data and image analysis for this study are ongoing.

Colorectal Cancer ("CRC") and Synchronous Liver Metastases

During 2017, we initiated an imaging study in subjects with CRC and liver metastases via IV administration of Tc99m tilmanocept. This study was supported through a SBIR grant (NIH/NCI 1 R44 CA1962783-01A1; ClinicalTrials.gov NCT03029988). The trial intended to enroll up to 12 subjects with dose modification. After an interim analysis of the first three completed subjects, a decision was made to not continue with the trial and the study is now closed. An initial presentation took place at SNMMI in June of 2018. An additional report has been submitted to the National Cancer Institute ("NCI") on the early results of this study. The final study report has been completed and submitted to the FDA.

Nonalcoholic Steatohepatitis

We have concluded a clinical study (ClinicalTrials.gov NCT03332940) that was originally designed to enroll 12 subjects with IV administration of Tc99m tilmanocept and an imaging comparator to identify and quantify the extent of NASH lesions in human patients. A semiquantitative evaluation of the images from the first six subjects indicated that imaging the remaining six subjects planned in the study may not sufficiently further our knowledge of Tc99m tilmanocept imaging in individuals with NASH to justify continuing the study using the current protocol. The study is now complete. Ongoing quantitative analyses of the images from the first six subjects will determine if future studies in subjects with NASH are likely to be productive. Initial results were presented at the NASH Summit in Boston in April 2018, and the results are available on Navidea's website.

Tuberculosis ("TB")

In April 2019, we announced that Professor Mike Sathekge, MBChB, M. Med (Nuclear Medicine), PhD, Professor and Head of the Department of Nuclear Medicine in the Faculty of Health Sciences at the University of Pretoria/Steve Biko Academic Hospital, planned to initiate a comparative study evaluating the use of tilmanocept in patients with TB. The purpose of this ongoing study is to explore using 68Ga tilmanocept as an aid in TB patient management while contributing to the better understanding of the biology of TB granulomas. CD206+ macrophages constitute one of the most abundant cell types in TB granulomas. Therefore, a molecular probe such as 68Ga-labeled tilmanocept targeting mannose receptor CD206 expressed on macrophages holds great promise not only in understanding the biology of TB granulomas, but may also support future development of a tilmanocept-like drug delivery vehicle for delivering therapeutic interventions to TB granulomas. Navidea has provided tilmanocept for use in this study, and several subjects have been injected and imaged to date. Successful completion of this study could support an extended claim of 68Ga-tilmanocept.

Biomarker Application and Qualification

In November 2017, the Company commenced the qualification of the biomarker CD206 with the FDA Biomarker Section of The Center for Drug Evaluation and Research ("CDER"). As per FDA protocol, Navidea submitted a draft letter of intent ("LOI") to CDER prior to the November 2017 meeting. According to the CDER directive, "the Biomarker Qualification Program was established to support the CDER's work with external stakeholders to develop biomarkers that aid in the drug development process. Through the FDA's Biomarker Qualification Program, an entity may request regulatory qualification of a biomarker for a particular context of use ("COU") in drug development." Following the meeting with the FDA, and because of Navidea's data sets and the general external publication database, Navidea, in conjunction with FDA, is now reviewing the LOI with the FDA's recommended consultants. Navidea has revised the LOI draft strategy in order to expedite the application process. In March 2018, Navidea had a follow-up meeting with the FDA's assigned strategist, during which the potential to further narrow the LOI elements was reviewed. Navidea is continuing the process of finalizing the COU LOI and providing the background data sets for qualification review with the FDA/CDER. Additional meetings have taken place and the pursuit of this qualification is ongoing.

Manocept Platform – In-Vitro and Pre-Clinical Immunotherapeutics Data

The therapeutic drug delivery model enables the Company to leverage its technology over many potential disease applications and with multiple partners simultaneously without significant capital outlays. To date, the Company has developed two lead families of therapeutic products. The MT-1000 series is designed to deplete activated macrophages via apoptosis and/or alter the phenotype of macrophages. The MT-2000 series is designed to modulate activated macrophages from a classically activated phenotype to the alternatively activated phenotype. Both families have been tested in a number of disease models in rodents.



We have already reported on the peripheral infectious disease aspects of KS, including HIV and HHV8 (CROI, Boston 2016, and KS HHV8 Summit Miami 2015). As noted, we continue this work funded by the NIH/NIAID and NCI. The Company has completed preclinical studies employing both MT 1000-class and 2000-class therapeutic conjugates of Manocept. The positive results from these studies are indicative of Manocept's specific targeting supported by its strong binding affinity to CD206 receptors. This high degree of specificity is a foundation of the potential for this technology to be useful in treating diseases linked to the over-activation of macrophages. This includes various cancers as well as autoimmune, infectious, CV, and CNS diseases.

Kaposi's Sarcoma

The novel MT-1000 class constructs are designed to specifically deliver doxorubicin, a chemotoxin, which can kill KS tumor cells and their tumor-associated macrophages, potentially altering the course of cancer. We have received additional funding to continue therapeutic studies in this disease with the goal of completing an investigational new drug ("IND") submission for a Manocept construct (MT-1000 class of compounds) consisting of tilmanocept linked to doxorubicin for the treatment of KS. The first part of the grant, now complete, supported analyses including *in vitro* and cell culture studies, to be followed by Parts 2 and 3 FDA-required preclinical animal testing studies. The information from these studies will be combined with other information in an IND application that will be submitted to the FDA requesting permission to begin testing the compound in selected KS subjects (supported by NIH/NCI 1 R44 CA206788-01).

Other Immunotherapeutic Applications

The Company continues to evaluate emerging data in other disease states to define areas of focus, development pathways and partnering options to capitalize on the Manocept platform, including ongoing studies in KS, RA and infectious diseases. The immuno-inflammatory process is remarkably complex and tightly regulated with indicators that initiate, maintain and shut down the process. Macrophages are immune cells that play a critical role in the initiation, maintenance, and resolution of inflammation. They are activated and deactivated in the inflammatory process. Because macrophages may promote dysregulation that accelerates or enhances disease progression, diagnostic and therapeutic interventions that target macrophages may open new avenues for controlling inflammatory diseases. There can be no assurance that further evaluation or development will be successful, that any Manocept platform product candidate will ultimately achieve regulatory approval, or if approved, the extent to which it will achieve market acceptance.

Risks Associated with Our Business and this Offering

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section of this prospectus entitled "Risk Factors" and under similarly titled headings of the documents incorporated herein by reference. You should read these risks before you invest in our securities. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business and this offering include:

- The global COVID-19 pandemic may continue to impact our business, financial condition or prospects, including a decline in the volume of procedures using
 our products, potential delays and disruptions to global supply chains, manufacturing activities, logistics, operations, employees and contractors, the business
 activities of our suppliers, distributors, customers and other business partners, as well as the effects on worldwide economies, financial markets, social
 institutions, labor markets and healthcare systems.
- There is substantial doubt about our ability to continue as a going concern, which may affect our ability to obtain future financing and may require us to curtail our operations. We will need to raise additional capital to support our operations.
- We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain.
- Our product candidates must undergo rigorous clinical testing, such clinical testing may fail to demonstrate safety and efficacy and any of our product candidates could cause undesirable side effects, which would substantially delay or prevent regulatory approval or commercialization.



- We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.
- If our competitors are able to develop and market products that are more effective, safer or more affordable than ours, or obtain marketing approval before we
 do, our commercial opportunities may be limited.
- If you purchase our securities in this offering, you will incur immediate and substantial dilution.

Corporate Information

Our corporate headquarters are located at 4995 Bradenton Avenue, Suite 240, Dublin, Ohio 43017-3552 and our telephone number is (614) 793-7500. We maintain a website at www.navidea.com, to which we regularly post copies of our press releases as well as additional information about us. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"), are available free of charge through the investor relations page of our internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

	The Offering
Issuer	Navidea Biopharmaceuticals, Inc.
Common Stock offered by the selling stockholder	2,373,529 Shares.
Use of proceeds	We will not receive any proceeds from the sale of the Shares in this offering. See "Use of Proceeds."
Dividend policy	We have not declared or paid any cash or other dividends on our common stock, and we do not expect to declare or pay any cash or other dividends in the foreseeable future. See "Dividend Policy."
Risk factors	Investing in our common stock involves a high degree of risk. You should carefully read and consider the information beginning on page 9 of this prospectus set forth under the headings "Risk Factors" and all other information set forth in this prospectus and the documents incorporated herein by reference before deciding to invest in our common stock.
NYSE American symbol	"NAVB"
	8

RISK FACTORS

Investing in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled "Risk Factors" contained in our annual report on Form 10-K for the fiscal year ended December 31, 2019 under the heading "Item 1A. Risk Factors," and as described or may be described in any subsequent quarterly report on Form 10-Q under the heading "Item 1A. Risk Factors," as well as in any applicable prospectus supplement and contained or to be contained in our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected.

In that case, the trading price of our securities could decline and you might lose all or part of the value of your investment.

USE OF PROCEEDS

We are registering the Shares pursuant to registration rights granted to the selling stockholder.

We will not receive any proceeds from the sale of the Shares covered by this prospectus and any accompanying prospectus supplement. All proceeds from the sale of the Shares will be for the account of the selling stockholder named herein.

The selling stockholder will pay any discounts, commissions, and fees of underwriters, selling brokers, dealer managers or similar securities industry professionals incurred by such selling stockholder in disposing of the Shares covered by this prospectus. We will bear all other costs, fees and expenses incurred in effecting the registration of the Shares covered by this prospectus and any accompanying prospectus supplement, including, without limitation, all registration and filing fees, NYSE American listing fees and expenses of our counsel and our accountants.

THE SELLING STOCKHOLDER

We have prepared this prospectus to allow the selling stockholder or its pledgees, donees, transferees or other successors in interest, to sell or otherwise dispose of, from time to time, up to 2,373,529 Shares.

On February 13, 2020, we entered into a Stock Purchase Agreement with the selling stockholder, pursuant to which the selling stockholder agreed to purchase the Shares for an aggregate purchase price of \$2,017,500, or \$0.85 per Share. The Shares issued in connection with the Stock Purchase Agreement represent approximately 9.3% of the outstanding shares of our common stock after such issuance.

In connection with certain registration rights we granted to the selling stockholder pursuant to the Stock Purchase Agreement and the Registration Rights Agreement, we filed with the SEC a registration statement on Form S-3, of which this prospectus forms a part, with respect to the resale or other disposition of the Shares offered by this prospectus from time to time on the NYSE American, in privately negotiated transactions or otherwise. We have agreed to prepare and file amendments and supplements to the registration statement to the extent necessary to keep the registration statement effective for the period of time required under our agreement with the selling stockholder.

The issuance of the Shares in connection with the Stock Purchase Agreement was not registered under the Securities Act of 1933, as amended (the 'Securities Act'), in reliance upon exemptions from registration provided by Section 4(a)(2) of the Securities Act, because the transactions did not involve any public offering.

The table below presents information regarding the selling stockholder and the Shares that the selling stockholder may offer and sell from time to time under this prospectus. Neither the selling stockholder nor any of its affiliates, officers, directors or principal equity holders have held any position or office or had any other material relationship with us or our affiliates within the past three years.

This table is prepared based on information supplied to us by the selling stockholder, and reflects beneficial ownership as of August 21, 2020. As used in this prospectus, the term "selling stockholder" includes the selling stockholder set forth below and any donees, pledgees, transferees or other successors-in-interest selling Shares received after the date of this prospectus from the selling stockholder as a gift, pledge, or other non-sale related transfer. Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act of and includes Shares with respect to which the selling stockholder have voting and investment power.

The number of shares in the column "Maximum Number of Shares of Common Stock that may be Offered Pursuant to this Prospectus" represents all of the Shares that the selling stockholder may offer under this prospectus. The fourth column assumes the sale of all the Shares offered by the selling stockholder pursuant to this prospectus and that the selling stockholder does not acquire any additional shares of common stock before the completion of this offering. However, because the selling stockholder may sell all or some of the Shares under this prospectus from time to time, or in another permitted manner, we cannot assure you as to the actual number of Shares that will be sold by the selling stockholder or that will be held by the selling stockholder after completion of any sales. The selling stockholder may sell some, all or none of its Shares in this offering. We do not know how long the selling stockholder will hold the Shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the Shares.

	Beneficial Ownership of Common Stock Prior to the Offering		Maximum Number of Shares of Common	Beneficial Ownership of Common Stock After the Offering	
Name of Selling Stockholder	Number of Shares	Percent of Class (%)	Stock that May Be Offered Pursuant to this Prospectus	Number of Shares (1)	Percent of Class (%)
John K. Scott, Jr.	5,678,772	21.6%	2,373,529	8,052,301	30.6%
TOTAL:	5,678,772	21.6%	2,373,529	8,052,301	30.6%

(1) Assumes that all the Shares of the selling stockholder covered by this prospectus are sold, and that the selling stockholder does not acquire any additional shares of common stock before the completion of this offering. However, because the selling stockholder can offer all, some, or none of its common stock, no definitive estimate can be given as to the number of Shares that the selling stockholder will ultimately offer or sell under this prospectus.

PLAN OF DISTRIBUTION

The selling stockholder, including its pledgees, donees, transferees, distributees, beneficiaries or other successors in interest, may from time to time offer some or all of the Shares by this prospectus. We will not receive any of the proceeds from the sale of the Shares covered by this prospectus by the selling stockholder. We will bear all fees and expenses incident to our obligation to register the Shares covered by this prospectus.

The selling stockholder may sell all or a portion of the Shares beneficially owned by it and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the Shares are sold through underwriters or broker-dealers, the selling stockholder will be responsible for underwriting discounts or commissions or agent's commissions in connection with the Shares held by the selling stockholder. The Shares may be sold on any national securities exchange or quotation service on which the Shares may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at privately negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions.

The selling stockholder may use any one or more of the following methods when disposing of Shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the Shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an over-the-counter distribution;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the effective date of the registration statement of which this prospectus is a part;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with a selling stockholder to sell a specified number of such Shares at a stipulated price per share;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholder may, from time to time, pledge or grant a security interest in some or all of the Shares owned by it and, if it defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell the Shares, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of the selling stockholder to include the pledgee, transferee, or other successors in interest as a selling stockholder under this prospectus. The selling stockholder also may transfer the Shares in other circumstances, in which case the transferees, pledgees or other successors in interest will be the beneficial owners for purposes of this prospectus.

In connection with the sale of Shares, or interests therein, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions it assumes. The selling stockholder may also sell Shares short and deliver the Shares to close out its short positions, or loan or pledge the Shares to broker-dealers that in turn may sell these securities. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of Shares offered by this prospectus, which Shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).



Broker-dealers engaged by a selling stockholder may arrange for other broker-dealers to participate in sales. If a selling stockholder effects certain transactions by selling Shares to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from such selling stockholder or commissions from purchasers of the Shares for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with applicable rules of the Financial Industry Regulatory Authority (*"FINRA"*); and in the case of a principal transaction a markup or markdown in compliance with applicable FINRA rules.

The aggregate proceeds to a selling stockholder from the sale of the Shares offered by it will be the purchase price of the Shares less discounts or commissions, if any. The selling stockholder reserves the right to accept and, together with its agents from time to time, to reject, in whole or in part, any proposed purchase of Shares to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholder also may resell all or a portion of the Shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided that it meets the criteria and conforms to the requirements of that rule.

The selling stockholder and any underwriters, broker-dealers or agents that participate in the sale of the Shares, or interests therein, may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the Shares may be underwriting discounts and commissions under the Securities Act. The selling stockholder is subject to the prospectus delivery requirements of the Securities Act.

To the extent required pursuant to Rule 424(b) under the Securities Act, the Shares to be sold, the name of the selling stockholder, the purchase price and public offering price, the names of any agents, dealer or underwriter, and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Shares may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Shares may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

The selling stockholder and any other person participating in a sale of the Shares registered under this prospectus will be subject to applicable provisions of the Exchange Act, and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the Shares by the selling stockholder and any other participating person. All of the foregoing may affect the marketability of the Shares and the ability of any person or entity to engage in market-making activities with respect to the Shares . In addition, we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholder for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholder may indemnify any broker-dealer that participates in transactions involving the sale of the Shares against certain liabilities, including liabilities arising under the Securities Act.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus, and any supplement thereto, has been passed upon for us by Thompson Hine LLP, 335 Madison Avenue, 12th Floor, New York, New York 10017-4611.

EXPERTS

The financial statements as of December 31, 2019 and 2018 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the years ended December 31, 2019 and 2018, respectively, have been so incorporated in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act, with respect to the securities being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference. The SEC maintains an internet website that contains reports, proxy statements, and other information about registrates, like us, that file electronically with the SEC. The address of that website is <u>www.sec.gov</u>. The information contained in, or that can be accessed through, the SEC's website is not incorporated by reference in, and is not part of, this prospectus supplement.

We are subject to the information and periodic reporting requirements of the Exchange Act, and we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at https://www.navidea.com/. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-37544):

- our annual report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 18, 2020;
- our quarterly reports on Form 10-Q for the quarters ended March 31, 2020 and June 30, 2020, filed with the SEC on May 15, 2020 and August 14, 2020, respectively;
- our current reports on Form 8-K and all amendments thereto on Form 8-K/A, filed with the SEC on February 14, 2020 February 18, 2020, May 12, 2020, May 21, 2020, June 4, 2020, July 31, 2020, August 10, 2020, August 12, 2020, and August 17, 2020; and
- the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC on February 8, 2011 including all amendments and reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, prior to the termination of the offering (excluding any information furnished rather than filed) shall be deemed to be incorporated by reference into this prospectus.



We will provide to each person, including any beneficial owners, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered with the prospectus. We will provide these reports or documents upon written or oral request at no cost to the requester. You should direct any written requests for documents to Navidea Biopharmaceuticals, Inc., Attention: Chief Financial Officer, 4995 Bradenton Avenue, Suite 240, Dublin, Ohio 43017-3552. You may also telephone us at (614) 793-7500.

You may also access these documents, free of charge, on the SEC's website at www.sec.gov or on our website at https://ir.navidea.com/sec-filings. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus or any accompanying prospectus supplement.

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference into this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such an offer or solicitation.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified to the fullest extent permitted under Delaware law. We also maintain insurance which protects our officers and directors against any liabilities incurred in connection with their service in such a capacity.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of ours in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.



PROSPECTUS



2,373,529 Shares of Common Stock

, 2020

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the types of fees and expenses listed below that were paid or are payable by us in connection with the issuance and distribution of the Shares to be registered by this registration statement. None of the expenses listed below are to be borne by any of the selling stockholder named in the prospectus that forms a part of this registration statement.

Expense	Amount
SEC Registration Fee	\$ 1,026
Accounting Fees and Expenses	12,000
Legal Fees and Expenses	25,000
Total	\$ 38,026

Item 15. Indemnification of Directors and Officers.

Section 102(b)(7) of the Delaware General Corporation Law (the "DGCL") permits a corporation in its certificate of incorporation or an amendment to eliminate or limit the personal liability of its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of law or obtained an improper personal benefit. Our certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation, to which he or she is a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. Section 145 further provides that in the case of actions brought by or in the right of the corporation shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145(g) of the DGCL further authorizes a corporation to purchase and maintain insurance on behalf of any indemnified person against any liability asserted against and incurred by such person in any indemnified capacity, or arising out of such person's status as such, regardless of whether the corporation would otherwise have the power to indemnify under Delaware law.

We have entered into indemnification agreements with each of our directors and executive officers. In general, these agreements provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer or in connection with his or her service at our request for another corporation or entity.

Article Nine, Section (b), of our certificate of incorporation further provides that no director will be personally liable to us or our stockholders for monetary damages or for any breach of fiduciary duty except for breach of the director's duty of loyalty to us or our stockholders, for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of law, pursuant to Section 174 of the Delaware General Corporation Law (which imposes liability in connection with the payment of certain unlawful dividends, stock purchases or redemptions), or any amendment or successor provision thereto, or for any transaction from which a director derived an improper personal benefit.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise.



We maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The foregoing discussion of indemnification merely summarizes certain aspects of indemnification provisions of, and is limited by reference to, the above discussed sections of the DGCL and our certificate of incorporation.

Item 16. Exhibits.

A list of exhibits included as part of this registration statement is set forth in the Exhibit Index and is incorporated herein by reference.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the 'Securities Act');
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of the registration statement;

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement or be used in the prospectus at that time shall be deemed to be the initial bona fide offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was made in the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement or prospectus that was part of the registration statement



- (5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby further undertakes:

- (1) for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and
- (2) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.



Exhibit Index

Exhibit	
Number	Exhibit Description
3.1	Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc., as corrected February 18, 1994, and amended June
	27, 1994, July 25, 1995, June 3, 1996, March 17, 1999, May 9, 2000, June 13, 2003, July 29, 2004, June 22, 2005, November 20, 2006,
	December 26, 2007, April 30, 2009, July 27, 2009, August 2, 2010, January 5, 2012, June 26, 2013 and August 18, 2016) (filed as Exhibit
	3.1 to the Company's Annual Report on Form 10-K filed March 31, 2017, and incorporated herein by reference).
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Navidea Biopharmaceuticals, Inc. (filed as Exhibit 3.1 to
	the Company's Current Report on Form 8-K, filed on April 26, 2019, and incorporated herein by reference).
3.3	Amended and Restated By-Laws dated July 21, 1993, as amended July 18, 1995, May 30, 1996, July 26, 2007, and November 7, 2013 (filed
	as Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q, filed November 12, 2013, and incorporated herein by reference).
3.4	Amended and Restated Certificate of Designations, Voting Powers, Preferences, Limitations, Restrictions, and Relative Rights of Series B
	Cumulative Convertible Preferred Stock (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June
	<u>26, 2013).</u>
3.5	Certificate of Designation of Preferences, Rights and Limitations of Series C Preferred Stock (filed as Exhibit 3.1 to the Company's Current
	Report on Form 8-K, filed by the Company on May 12, 2020, and incorporated herein by reference).
3.6	Form of Common Stock Certificate (filed as Exhibit 4.3 to the Company's Registration Statement on Form S-3, filed December 31, 2019,
	and incorporated herein by reference).
4.4	Stock Purchase Agreement, effective February 14, 2020, by and between Navidea Biopharmaceuticals, Inc. and John K. Scott (filed as
	Exhibit 10.28 to the Company's Annual Report on Form 10-K, filed March 18, 2020, and incorporated herein by reference).
4.5	Registration Rights Agreement, dated as of February 13, 2020, by and between Navidea Biopharmaceuticals, Inc. and John K. Scott, Jr.*
5.1	Opinion of Thompson Hine LLP.*
23.1	Consent of Thompson Hine LLP (included in Exhibit 5.1).
23.2	Consent of Independent Registered Public Accounting Firm, Marcum LLP.*
24.1	Power of Attorney is contained on the signature pages.
* Filed herew	ith.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing this registration statement on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dublin, State of Ohio, on August 25, 2020.

NAVIDEA BIOPHARMACEUTICALS, INC.

/s/ Jed A. Latkin							
Jed A. Latkin Chief Executive Officer	Officer,	Chief	Operating	Officer	and	Chief	Financial

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jed A. Latkin as true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission ("SEC"), and generally to do all such things in his name and behalf in his capacities as officer to enable Navidea Biopharmaceuticals, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the SEC, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, ratifying and confirming all that said attorneys-in-fact and agents, or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date	
/s/ Jed A. Latkin Jed A. Latkin	Chief Executive Officer, Chief Operating Officer, Chief Financial Officer and Director (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	August 25, 2020	
/s/ Y. Michael Rice Y. Michael Rice	Director (Chairman)	August 25, 2020	
/s/ Claudine Bruck Claudine Bruck, Ph.D.	Director	August 25, 2020	
/s/ Adam D. Cutler Adam D. Cutler	Director	August 25, 2020	
/s/ S. Kathryn Rouan S. Kathryn Rouan, Ph.D.	Director	August 25, 2020	

REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (this "Agreement"), dated as of February 13, 2020, by and betweenNAVIDEA BIOPHARMACEUTICALS, INC., a Delaware corporation (the "Company"), and John K. Scott, Jr. (the "Investor"). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Stock Purchase Agreement by and among the parties hereto, dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Purchase Agreement").

WHEREAS:

A. Upon the terms and subject to the conditions of the Purchase Agreement, (i) the Company has agreed to issue to the Investor, and the Investor has agreed to purchase, an aggregate of US\$2,017,500 of the Company's common stock, par value \$0.001 per share (the "**Common Stock**"), pursuant to the terms of the Purchase Agreement (such shares, the "**Purchase Shares**"); and

B. To induce the Investor to enter into the Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the **"1933 Act"**), and applicable state securities laws.

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Investor hereby agree as follows:

1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings:

a. "Person" means any person or entity including any corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.

b. "Register," "registered," and "registration" refer to a registration effected by preparing and filing one or more registration statements of the Company in compliance with the 1933 Act and pursuant to Rule 415 under the 1933 Act or any successor rule providing for offering securities on a continuous basis ("Rule 415"), and the declaration or ordering of effectiveness of such registration statement(s) by the U.S. Securities and Exchange Commission (the 'SEC").

c. "Registrable Securities" means all of the Purchase Shares, and any shares of capital stock issued or issuable with respect to the Purchase Shares as a result of any stock split, stock dividend, recapitalization, exchange or similar event.

d. "Registration Statement" means a registration statement of the Company covering only the sale of the Registrable Securities.

2. REGISTRATION.

a . <u>Registration</u>. Subject to the provisions hereof, not earlier than six months and a day after the date hereof, the Company shall file a registration statement for resale under the 1933 Act of all or part of the Registrable Securities. The Company shall use its commercially reasonable efforts to have the Registration Statement or any amendment declared effective by the SEC as soon as reasonably practicable in accordance with the rules and regulations promulgated under the 1933 Act. Subject to Permitted Delays (as defined below) and Section 3(e), the Company shall use commercially reasonable efforts to keep the Registration Statement effective pursuant to Rule 415 promulgated under the 1933 Act and available for sales of all of the Registrable Securities at all times until the earlier of (i) the date as of which the Investor may sell all of the Registrable Securities without restriction pursuant to Rule 144 promulgated under the 1933 Act (or successor thereto) or (ii) the date on which the Investor shall have sold all the Registrable Securities (the "**Registration Period**"). Except as contemplated in Section 3(e), and except with respect to the information furnished in writing to the Company by the Investor expressly for use in connection with the preparation of the Registration Statement and any amendments or supplements thereto and prospectuse contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

b. <u>Rule 424 Prospectus</u>. The Company shall, to the extent required by applicable securities regulations, from time to time file with the SEC, pursuant to Rule 424 promulgated under the 1933 Act, a prospectus and prospectus supplements, if any, to be used in connection with sales of the Registrable Securities under the Registration Statement. The Investor and its counsel shall have two (2) Business Days to review and comment upon such prospectus prior to its filing with the SEC. The Investor shall use its reasonable best efforts to comment upon such prospectus within two (2) Business Days from the date the Investor receive the final version of such prospectus.

c. <u>Sufficient Number of Shares Registered</u>. In the event the number of shares available under the Registration Statement is insufficient to cover the Registration Statement is the Company shall, to the extent necessary and permissible, amend the Registration Statement or file a new registration statement (a "**New Registration Statement**"), so as to cover all such Registrable Securities as soon as reasonably practicable. The Company shall use its reasonable best efforts to have such amendment and/or New Registration Statement become effective as soon as reasonably practicable following the filing thereof.

3. RELATED OBLIGATIONS.

With respect to the Registration Statement and whenever any Registrable Securities are to be registered pursuant to Sections 2(a) and (c), including on any New Registration Statement, the Company shall use its commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to any Registration Statement and the prospectus used in connection with such Registration Statement, as may be necessary to keep the Registration Statement or any New Registration Statement effective at all times during the Registration Period, subject to Permitted Delays and Section 3(e) hereof and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company covered by the Registration Statement or any New Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. Should the Company file a post-effective amendment to the Registration Statement or a New Registration Statement, the Company will use its reasonable best efforts to have such filing declared effective by the SEC within thirty (30) consecutive Business Days following the date of filing, which such period shall be extended for an additional thirty (30) Business Days if the Company receives a comment letter from the SEC in connection therewith. If (i) there is material non-public information regarding the Company which the Company's Board of Directors reasonably determines not to be in the Company's best interest to disclose and which the Company is not otherwise required to disclose, (ii) there is a significant business opportunity (including, but not limited to, the acquisition or disposition of assets (other than in the ordinary course of business) or any merger, consolidation, tender offer or other similar transaction) available to the Company which the Company's Board of Directors reasonably determines not to be in the Company's best interest to disclose and which the Company would be required to disclose under a Registration Statement or a New Registration Statement, or (iii) the filing of a Registration Statement or a New Registration Statement would violate any rule or regulation promulgated under the 1933 Act, then the Company may postpone or suspend filing or effectiveness of such Registration Statement or New Registration Statement or use of the prospectus under the Registration Statement or New Registration Statement for a period not to exceed sixty (60) consecutive days, provided that the Company may not postpone or suspend its obligation under this Section 3(a) for more than ninety (90) days in the aggregate during any twelve (12) month period (each, a "Permitted Delay").

b. The Company shall submit to Investors for review and comment any disclosure in the Registration Statement, any New Registration Statement and all amendments and supplements thereto (other than prospectus supplements that consist only of a copy of a filed Form 10-K, Form 10-Q or a Current Report on Form 8-K or any amendment as a result of the Company's filing of a document that is incorporated by reference into the Registration Statement or New Registration Statement) containing information provided by the Investor for inclusion in such document and any descriptions or disclosure regarding the Investor, the Purchase Agreement, including the transaction contemplated thereby, or this Agreement at least two (2) Business Days prior to their filing with the SEC, and not file any document in a form to which Investor reasonably and promptly objects. Upon request of Investor, the Company shall provide to the Investor all disclosure in the Registration Statement or any New Registration Statement and all amendments and supplements thereto (other than prospectus supplements that consist only of a copy of a filed Form 10-K, Form 10-Q or Current Report on Form 8-K or any amendment as a result of the Company's filing of a document that is incorporated by reference into the Registration Statement or New Registration Statement) within reasonable period of time for review and comment, and not file any document in a form to which Buyer reasonable best efforts to comment upon the Registration Statement or any New Registration Statement and any amendments or supplements thereto as soon as practicable after Buyer receives the final version thereof. The Company shall furnish to the Investor, without charge, any correspondence from the SEC or the staff of the SEC to the Company or its representatives relating to the Registration Statement.

c. Upon request of Investor, the Company shall furnish to the Investor, (i) promptly after the same is prepared and filed with the SEC, at least one electronic or PDF copy of the Registration Statement and any amendment(s) thereto, including all financial statements and schedules, all documents incorporated therein by reference and all exhibits, (ii) upon the effectiveness of a Registration Statement, an electronic or PDF copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Investor may reasonably request), and (iii) such other documents, including electronic or PDF copies of any preliminary or final prospectus, as the Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by the Investor.

d. The Company shall use reasonable best efforts to (i) register and qualify, unless an exemption from registration and qualification is available, the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of such jurisdictions in the United States as Investor reasonably requests, (ii) subject to Permitted Delays, prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications in effect at all times during the Registration Period, (iii) take such other actions as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction or qualification or dyna potification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

e. Subject to Permitted Delays, as promptly as reasonably practicable after becoming aware of such event or facts, the Company shall notify the Investor in writing if the Company has determined that the prospectus included in any Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and as promptly as reasonably practical (taking into account the Company's good faith assessment of any adverse consequences to the Company and its stockholders of premature disclosure of such event or facts) prepare a prospectus supplement or amendment to such Registration Statement to correct such untrue statements and, upon Investor's request, deliver a copy of such prospectus supplement or amendment to the Investor. In providing this notice to Investor, the Company shall not include any other information about the facts underlying the Company's determination and shall not in any way communicate any material nonpublic information about the Company shall also promptly notify the Investor in writing (i) when a prospectus or any prospectus supplement or any post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to the Investor by facsimile or e-mail on the same day of such effectiveness), (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement over the altermination that a post-effective amendment to a Registration for disposition of securities by Buyer be considered a breach by the Company of its obligations under this Agreement. The preceding sentence in this Section 3(e) does not limit whether an event of default has occur

f. The Company shall use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of any Registration Statement, or the suspension of the qualification of any Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest practical time and to notify the Investor of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

g. The Company shall (i) cause all the Registrable Securities to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all the Registrable Securities if the Principal Market (as such term is defined in the Purchase Agreement) is an automated quotation system. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section.

h. The Company shall cooperate with the Investor to facilitate the timely preparation and delivery of certificates or book-entry forms (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to any Registration Statement and enable such certificates or book-entry forms to be in such denominations or amounts as Investors may reasonably request and registered in such names as the Investors may request.

i. The Company shall at all times provide a transfer agent and registrar with respect to its Common Stock.

j. If reasonably requested by Investor, the Company shall (i) as promptly as reasonably practicable, incorporate in a prospectus supplement or posteffective amendment to the Registration Statement such information as the Investor believes should be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities; (ii) make all required filings of such prospectus supplement or post-effective amendment as promptly as practicable once notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement (including by means of any document incorporated therein by reference).

k. The Company shall use its reasonable best efforts to cause the Registrable Securities covered by any Registration Statement to be registered with or approved by such other governmental agencies or authorities in the United States as may be necessary to consummate the disposition of such Registrable Securities.

l. Within two (2) Business Days after any Registration Statement is ordered effective by the SEC, the Company shall deliver to the Transfer Agent for such Registrable Securities (with copies to the Investor) confirmation that such Registration Statement has been declared effective by the SEC in the form attached hereto as <u>Exhibit A</u>. Thereafter, if reasonably requested by the Investor at any time, the Company shall deliver to the Investor a written confirmation of whether or not the effectiveness of such Registration Statement has lapsed at any time for any reason (including, without limitation, the issuance of a stop order) and whether or not the Registration Statement is currently effective and available to the Investor for sale of all of the Registrable Securities.

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m. The Company agrees to take all other reasonable actions as necessary and reasonably requested by Investor to expedite and facilitate disposition by the Investor of Registrable Securities pursuant to any Registration Statement.

4. OBLIGATIONS OF THE INVESTOR.

a. The Investor agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any amendments and supplements to any Registration Statement hereunder.

b. The Investor agrees that, upon receipt of any notice from the Company of the happening of any event or existence of facts of the kind described in Section 3(f) or any notice of the kind described in the first sentence of Section 3(e), the Investor will immediately discontinue disposition of Registrable Securities pursuant to any registration statement(s) covering such Registrable Securities until the Investor's receipt (which may be accomplished through electronic delivery) of the copies of the filed supplemented or amended registration statement and/or prospectus contemplated by Section 3(f) or the first sentence of Section 3(e). In addition, upon receipt of any notice from the Company of the kind described in the first sentence of Section 3(e), the Investor will immediately discontinue purchases or sales of any securities of the Company unless such purchases or sales are in compliance with applicable U.S. securities laws. Notwithstanding anything to the contrary, the Company shall cause its Transfer Agent to deliver as promptly as practicable shares of Common Stock without any restrictive legend in accordance with the terms of the Purchase Agreement in connection with any sale of Registrable Securities with respect to which the Investor has received a Purchase Notice or VWAP Purchase Notice (both as defined in the Purchase Agreement) prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(f) or the first sentence of Section 3(e) and for which the Investor has not yet settled.

5. EXPENSES OF REGISTRATION.

All reasonable expenses of the Company, other than sales or brokerage commissions and fees and disbursements of counsel for the Investor, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company, shall be paid by the Company.

6. INDEMNIFICATION.

To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend the Investor, each Person, if any, who controls the Investor, the members, the directors, officers, partners, employees, agents, representatives of the Investor and each Person, if any, who controls the Investor within the meaning of the 1933 Act or the Securities Exchange Act of 1934, as amended (the "1934 Act") (each, an "Indemnified Person"), against any third party losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys' fees, amounts paid in settlement (with the prior consent of the Company, such consent not to be unreasonably withheld) or reasonable expenses, (collectively, "Claims") reasonably incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency or body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in the Registration Statement, any New Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to the Registration Statement or any New Registration Statement (the matters in the foregoing clauses (i) through (iii) being, collectively, "Violations"). The Company shall reimburse each Indemnified Person promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (A) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by the Investor or such Indemnified Person expressly for use in connection with the preparation of the Registration Statement, any New Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company; (B) with respect to any superseded prospectus, shall not inure to the benefit of any such person from whom the person asserting any such Claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any other Indemnified Person) if the untrue statement or omission of material fact contained in the superseded prospectus was corrected in the revised prospectus, as then amended or supplemented, if such revised prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e), and the Indemnified Person was promptly advised in writing not to use the incorrect prospectus prior to the use giving rise to a violation; (C) shall not be available to the extent such Claim is based on a failure of the Investor to deliver, or to cause to be delivered, the prospectus made available by the Company, if such prospectus was theretofore made available by the Company pursuant to Section 3(c) or Section 3(e); and (D) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 9.

b. In connection with the Registration Statement or any New Registration Statement or prospectus, the Investor agrees to indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement or any New Registration Statement, each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (collectively and together with an Indemnified Person, an "Indemnified Party"), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violatom or from the failure of the Investor to deliver or to cause to be delivered the prospectus made available by the Company, if such prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e); and, subject to Section 6(d), the Investor will reimburse any legal or other expenses reasonably incurred by them in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Investor, which consent shall not be unreasonably withheld; provided, further, however, that the Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to the Investor as a result of the sale of Registrable Securities pursuant to such registration statement. Such registrable Securities by the Investor pursuant to Section 9.

Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be, and upon such notice, the indemnifying party shall not be liable to the Indemnified Person or Indemnified Party for any legal or other expenses subsequently incurred by the Indemnified Person or Indemnified Party in connection with the defense thereof; provided, however, that an Indemnified Person or Indemnified Party (together with all other Indemnified Persons and Indemnified Parties that may be represented without conflict by one counsel) shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The Indemnified Party or Indemnified Person shall cooperate with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such claim or litigation. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred. Any person receiving a payment pursuant to this Section 6 which person is later determined to not be entitled to such payment shall return such payment (including reimbursement of expenses) to the person making it.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Party

7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any party who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities.

8. REPORTS AND DISCLOSURE UNDER THE SECURITIES ACTS.

With a view to making available to the Investor the benefits of Rule 144 promulgated under the 1933 Act or any other similar rule or regulation of the SEC that may at any time permit the Investor to sell securities of the Company to the public without registration ("**Rule 144**"), the Company agrees, at the Company's sole expense, to:

a. use its reasonable best efforts to make and keep public information available, as those terms are understood and defined in Rule 144;

b. use its reasonable best efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements and the filing of such reports and other documents is required to satisfy the current public information requirements of Rule 144;

c. furnish to the Investor so long as the Investor owns Registrable Securities, as promptly as practicable at Buyer's request, (i) a written statement by the Company that it has complied in all material respects with the requirements of Rule 144(c)(1)(i) and (ii), and (ii) such other information, if any, as may be reasonably requested to permit the Investor to sell such securities pursuant to Rule 144 without registration; and

d. take such additional action as is reasonably requested by the Investor to enable the Investor to sell the Registrable Securities pursuant to Rule 144, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Company's Transfer Agent as may be reasonably requested from time to time by the Investor and otherwise provide reasonable cooperation to the Investor and the Investor's broker to effect such sale of securities pursuant to Rule 144.

The Company agrees that damages may be an inadequate remedy for any breach of the terms and provisions of this Section 8 and that Buyer shall, whether or not it is pursuing any remedies at law, be entitled to seek equitable relief in the form of a preliminary or permanent injunctions, without having to post any bond or other security, upon any breach or threatened breach of any such terms or provisions.

9. ASSIGNMENT OF REGISTRATION RIGHTS.

The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor; provided, however, that any transaction, whether by merger, reorganization, restructuring, consolidation, financing or otherwise, whereby the Company remains the surviving entity immediately after such transaction shall not be deemed an assignment. The Investor may not assign its rights under this Agreement without the prior written consent of the Company.

10. AMENDMENT OF REGISTRATION RIGHTS.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Investor.

11. MISCELLANEOUS.

a. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iii) upon receipt, when sent by electronic message (provided the recipient responds to the message and confirmation of both electronic messages are kept on file by the sending party); or (iv) one (1) Business Day after timely deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

If to the Company:

Navidea Biopharmaceuticals, Inc. 4995 Bradenton Avenue, Suite 240 Dublin, Ohio 43107 Telephone: 614-793-7500 Attention: Jed Latkin Email: jlatkin@navidea.com

With a copy (which shall not constitute notice) to:

Thompson Hine LLP 335 Madison Avenue 12th Floor New York, New York 10017-4611 Telephone: 212-908-3905 Attention: Faith L. Charles Email: Faith.Charles@ThompsonHine.com

If to Investor: the address set forth on the Investor's signature page.

or at such other address and/or facsimile number and/or to the attention of such other person as the recipient party has specified by written notice given to each other party at least one (1) Business Day prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date, and recipient facsimile number, (C) electronically generated by the sender's electronic mail containing the time, date and recipient email address or (D) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of receipt in accordance with clause (i), (ii) (iii) or (iv) above, respectively. Any party to this Agreement may give any notice or other communication hereunder using any other means (including messenger service, ordinary mail or electronic mail), but no such notice or other communication shall be deemed to have been duly given unless it actually is received by the party for whom it is intended.

b. No failure or delay in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

c. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of Chicago for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process heing served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceability of any provision of this Agreement in that jurisdiction. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.

d. This Agreement, the Purchase Agreement and the other Transaction Documents constitute the entire understanding among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the Purchase Agreement and the other Transaction Documents supersede all other prior oral or written agreements between the Investor, the Company, their affiliates and persons acting on their behalf with respect to the subject matter hereof and thereof.

e. Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

f. The headings in this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

g. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile or pdf (or other electronic reproduction of a) signature shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or pdf (or other electronic reproduction of a) signature.

h. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

i. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

j. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

* * * * *

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of day and year first above written.

THE COMPANY:

NAVIDEA BIOPHARMACEUTICALS, INC.

By: /s/ Jed A. Latkin Name: Jed A. Latkin Title: CEO, CFO, COO IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of day and year first above written.

INVESTOR:

John K. Scott, Jr. JOHN K. SCOTT, JR.

Address: 5251 DTC Parkway, Suite 285 Greenwood Village, CO 80111 Email: jks3@cheqnet.net

With a copy to: Winstead PC 401 Congress Ave. Suite 2100 Austin, Texas 78701-3619 Attention: James G. Ruiz Email: jruiz@winstead.com

EXHIBIT A

FORM OF NOTICE OF EFFECTIVENESS OF REGISTRATION STATEMENT

[Date]

[Transfer Agent] [Address] [Address] Attention: [Contact]

RE: NAVIDEA BIOPHARMACEUTICALS, INC.

Ladies and Gentlemen:

We refer to that certain Stock Purchase Agreement, dated as of February 13, 2020 (the "Purchase Agreement"), entered into by and between NAVIDEA BIOPHARMACEUTICALS, INC., a Delaware corporation (the "Company") and the Investor listed therein (the "Investor") pursuant to which the Company has agreed to issue to the Investor shares of the Company's Common Stock, par value \$0.001 per share (the "Common Stock"), in an amount up to \$2,017,500, in accordance with the terms of the Purchase Agreement. In connection with the transactions contemplated by the Purchase Agreement, the Company has registered with the U.S. Securities and Exchange Commission (the "SEC") the sale by the Investor of the following shares of Common Stock:

(1) up to 2,373,529 shares of Common Stock (the"Purchase Shares").

In connection with the transactions contemplated by the Purchase Agreement, the Company has filed a registration statement on Form S-[_] (File No. 333_____) (the **"Registration Statement"**) with the SEC relating to the sale by the Investor of the Purchase Shares. Accordingly, we advise you that (i) the SEC has entered an order declaring the Registration Statement effective under the Securities Act of 1933 Act (the "1933 Act") at __ [A./P.]M. on _____, 20__, (ii) we have no knowledge, after review of the stop order notification website maintained by the SEC, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the SEC and (iii) the Purchase Shares and the Commitment Shares are available for sale under the 1933 Act pursuant to the Registration Statement. Accordingly, and in reliance on certain covenants made by the Investor regarding the manner of sale of the Shares, certificates or book-entry forms representing the Shares may be issued without any restrictive legend.

Very truly yours,

CC: [_]





ATLANTA CINCINNATI COLUMBUS NEW YORK CHICAGO CLEVELAND DAYTON WASHINGTON, D.C.

August 25, 2020

Navidea Biopharmaceuticals, Inc. 4995 Bradenton Avenue, Suite 240 Dublin, Ohio 43017

Ladies and Gentlemen:

We have acted as counsel to Navidea Biopharmaceuticals, Inc., a Delaware corporation (the "*Company*") in connection with (i) the preparation and filing of the Registration Statement on Form S-3, being filed on the date hereof with the Securities and Exchange Commission (the "*Commission*") under the Securities Act of 1933, as amended (the "*Securities Act*"), (as so filed and as amended, the "*Registration Statement*") and the related prospectus contained in the Registration Statement relating to the registration of the offering by the selling stockholder named in the Registration Statement under the caption "The Selling Stockholder" (the "*Selling Stockholder*") of up to an aggregate of 2,373,529 shares of the Company's common stock, \$0.001 par value per share (the "*Shares*") pursuant to the Registration Rights Agreement, dated February 13, 2020 (the "*Registration Rights Agreement*"), by and between the Company and the Selling Stockholder.

In rendering this opinion, we have examined the Registration Statement, the Prospectus, the Registration Rights Agreement, the Stock Purchase Agreement, dated February 13, 2020, between the Company and the Selling Stockholder, and such other documents and reviewed such questions of law as we have deemed advisable in order to render our opinion set forth below. In such examination, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, that all parties (other than the Company) had the requisite power and authority (corporate or otherwise) to execute, deliver and perform such agreements or instruments, that all such agreements or instruments have been duly authorized by all requisite action (corporate or otherwise), executed and delivered by such parties, that such agreements are valid, binding and enforceable obligations of such parties, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies and the authenticity of the originals of such latter documents. In providing this opinion, we have further relied as to certain matters on information obtained from public officials and officers of the Company.

As a result of and subject to the foregoing, we are of the opinion that the Shares have been duly authorized by the Company and are validly issued, fully paid and non-assessable.

Our opinions expressed above are limited to the General Corporation Laws of the State of Delaware and laws of the State of New York, in each case as currently in effect, and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

This opinion letter is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares, the Registration Statement or the Prospectus.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to being named under the caption "Legal Matters" contained in the Prospectus. In giving this consent, we do not hereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Thompson Hine LLP

Thompson Hine LLP

THOMPSON HINE LLP Attorneys at Law 335 Madison Avenue 12th Floor New York, New York 10017-4611 www.ThompsonHine.com Phone: 212.344.5680 Fax: 212.344.6101

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Navidea Biopharmaceuticals, Inc. on Form S-3 of our report dated March 18, 2020, which refers to the adoption of new accounting standard ASU No. 2016-02, *Leases (Topic 842), as amended*, effective January 1, 2019, and which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Navidea Biopharmaceuticals, Inc. as of December 31, 2019 and 2018 and for the years then ended appearing in the Annual Report on Form 10-K of Navidea Biopharmaceuticals, Inc. for the year ended December 31, 2019. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum llp

Marcum llp New Haven, CT August 25, 2020